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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,100	12/12/2003	Barry S. Grant	10200-1320	1896

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EXAMINER

LOPEZ, FRANK D

ART UNIT PAPER NUMBER

3745

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No. 10/735,100	Applicant(s) GRANT, BARRY S.	
	Examiner F. Daniel Lopez	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Claim Rejections - 35 USC § 112

Claims 8-10 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “fuel impeller” in claim 8 line 6 is used by the claim to mean “diaphragm”, while the accepted meaning is “rotary turbine type pumping element.” The term is indefinite because the specification does not clearly redefine the term. Suggest that this limitation be deleted from claim 8, and claim 9 be amended to claim –a diaphragm in said housing--.

Claims 9 and 10 are indefinite, since they depend from claim 8.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-10 are rejected under 35 U.S.C. § 103 as being unpatentable over Rockwell in view of Stumpf. Rockwell discloses a fuel pump (e.g. fig 2) having a mounting arm mounted to a combustion engine (10, fig 1) comprising a pump housing having a bowl (housing for chamber 50) and a hood (housing for chamber 48), each having a curved exterior surface substantially co-axial with respect to a longitudinal axis; a flexible diaphragm (42), substantially normal to the longitudinal axis, having a central portion movable, by a diaphragm actuator (44), parallel to the longitudinal axis; inlet (connected to 18) and outlet (connected to 22) ports in the bowl; but does not disclose that there are a plurality of heat transfer fins, extending externally of and encircling the bowl and hood, and interrupted by the ports, with the fins extending from the mounting arm.

Inherently, the engine shown in fig 1 is an in-line engine, with a fan in front of the engine (to the right in fig 1), pulling air through a radiator and blowing it past the engine (from the right to the left in fig 1). If not inherent, it would have been obvious at the time the invention was made to one having ordinary skill in the art to have a fan in front of the engine (to the right in fig 1) of Rockwell, pulling air through a radiator and blowing it past the engine (from the right to the left in fig 1), parallel to the diaphragm.

Stumpf teaches, for a fuel pump (16) mounted to a combustion engine (10) comprising a pump housing; that there are a plurality of heat transfer fins (32), extending externally of the housing, for the purpose of preventing vapor lock (e.g. column 2 line 44-45), by increasing the surface area of the housing contacting an airflow, thereby increasing heat transfer from the fuel pump (e.g. column 4 line 20-24).

Official notice is taken that in the heat transfer art wherein fins are positioned in airflow, that the fins are positioned parallel to the airflow, and can encircle the device to be cooled.

Since Rockwell and Stumpf are both from the same field of endeavor, the purpose disclosed by Stumpf would have been recognized in the pertinent art of Rockwell. It would have been obvious at the time the invention was made to one having ordinary skill in the art to position a plurality of heat transfer fins, extending externally of and encircling the bowl, hood and mounting arm of Rockwell, parallel to the airflow (and

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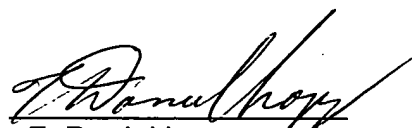
thereby to the diaphragm), as taught by Stumpf, for the purpose of preventing vapor lock, by increasing the surface area of the housing contacting an airflow, thereby increasing heat transfer from the fuel pump.

Since the ports have fuel lines extending out of them, they must interrupt the fins.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is (703) 872-9306. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.



F. Daniel Lopez
Primary Examiner
Art Unit 3745
March 28, 2005